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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,283	10/28/2003	Robert Richard Dykstra	9086M	3960
27752 7590 04/26/2011 THE PROCTER & GAMBLE COMPANY Global Legal Department - IP Sycamore Building - 4th Floor 299 East Sixth Street CINCINNATI, OH 45202				
EXAMINER				
GRESO, AARON J				
ART UNIT		PAPER NUMBER		
1763				
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04/26/2011		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/695,283

Applicant(s)

DYKSTRA ET AL.

Examiner

AARON GRESO

Art Unit

1763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 6-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 6-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-912)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02 December 2010 has been entered.

Any rejections and/or objections made in the previous Office Action and not repeated below, are hereby withdrawn.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action. References not previously cited are found per the attached PTO-892 for this Office Action.

The new grounds of rejection set forth below are necessitated by applicant's amendment filed on 02 December 2010.

In particular, Claim 1 and its dependent Claims, 6-9 have been amended to now require copolymers to comprise vinyl pyrrolidone and polyvinyl acetate in a specified weight range. This changes the Scope of the instant Claims.

Claim Rejections - 35 USC § 103

Claims 1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wells et al. (US 5,883,058 and its incorporated reference US 5,120,532 to Wells et al.) in view of Hood (US 2002/0058015) as evidenced by Combariza et al. (Journal of High Resolution Chromatography 1994 vol 17 pp 643-646).

Regarding Claim 1:

Claim 1 has 11 limitations (A-K); the limitations are listed and labeled below in the order in which they appear:

- A. Non-encapsulated benefit delivery system
- B. Aqueous dispersion of a water insoluble polymer particle and a benefit agent
- C. The polymer particle has a glass transition temperature from 50 to 120°C
- D. a vinyl acetate monomer
- E. a pyrrolidone monomer
- F. Weight ratio of cationic to non-cationic monomer is about 10 : 0.02 to 5 : 2.5
- G. Benefit agent and polymer are non-polymerically associated
- H. Response Factor (RF) of benefit agent, when placed upon the polymer is about 1.5 when measured by test Protocol I or II.
- I. Benefit agent is selected from group consisting of top note perfume raw materials and perfume accords having a Kovats Index from about 1000 to about 1400
- J. Dispersion [system] further comprising a colloidal stabilizer
- K. Dispersion [system] having a viscosity in a range between 7,000 and 10,000 cps.

As to Claims 1 and 9:

Wells et al. discloses hair shampoo compositions having improved cleansing lathering and styling benefits comprising polymeric material (col 1 lines 4-15).

The shampoo materials comprise surfactants (Abstract) {taken as an adjunct material and **addressing Claim 9**}.

Further as to Claim 1:

The compositions, that are not indicated to comprise encapsulated material {**addressing A**}; are indicated to be shampoos and placed in water (col 2 lines 29-32) that comprise particles (col 6 lines 55-59), also comprise materials that are suitable for rendering the compositions aesthetically acceptable with additional benefits, identified as perfumes {taken as providing a benefit agent and **addressing B in part**} (col 21 lines 8-12 and 22-23). Compositions are to include water soluble, silicone cationic conditioning polymers (col 16 lines 40-67 and Col 17 and col 18 lines 1-31) with non-water soluble hair styling polymers (col 5 lines 32-33) {**further addressing B**}; the hair styling polymer having a T_g of 80°C (claim 1 col 24) {**addressing C**}.

Polymeric material is indicated to comprise hydrophobic vinyl acetate monomers (col 6 lines 14-16); that further comprise monomers that are not hydrophobic (col 5 lines 38-40). Copolymers being identified (col 5 lines 25-30) in the incorporated reference: Wells et al.; US 5,120,532; a preferred hydrophilic monomer being vinyl pyrrolidone and a preferred hydrophobic monomer being vinyl acetate (US 5,120,532: col 4 line 5 and line 24-25) with a specified material indicated to be a copolymer of pyrrolidone / vinyl acetate with up to 30% by weight (taken as from 0 to 30%) of pyrrolidone (col 4 lines 40-46) for shampoo systems; 30 percent being expected by one of ordinary skill in the art

to be within the vinyl acetate : vinyl pyrrolidone range of 5 : 2.5 **{addressing D, E, and F}**).

Viscosities for the polymeric material comprising shampoo compositions are further indicated to be in the range of 1500 to 12,000 cps (col 21 lines 56-59); this range overlapping with the compositions **{addressing K}**.

As to J and G:

Wells et al. do not further indicate the presence of a colloidal stabilizer.

On the other hand, Hood et al. discloses compositions for delivering active materials (Title); compositions are indicated to be applicable to aqueous personal care formulations (page 1 [0016]); personal care formulations being recognized in the art as being a hair care product (page 1 [0005] and page 2 [0029]); active materials being indicated as fragrances (page 1 [0020]).

Compositions are indicated to comprise particles from 1 nm to <500 μm , that comprise crosslinking agents (page 2 [0022]-[0024]) for aqueous two phase compositions with a viscosity of 1000 to a preferred 20,000 cps (ibid) **{addressing J}**. The compositions with the particles are indicated to be stable aqueous polymer compositions having water soluble polymers (Abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention, to have added the colloidal particle material taught by Hood et al.; for providing stable compositions; to the compositions of Wells et al., ready for improvement, comprising the same or similar materials for the same or similar applications, with a reasonable expectation of success.

Further as to G, H and I:

Although Wells et al. indicates that perfumes are benefit-adding agents (col 21 lines 10-12 and 23), the reference does not further indicate the presence of a Kovats perfume material with a value of 1000-1400.

On the other hand, Hood et al. also discloses compositions comprising d-limonene (Example 17 page 5-6 and Example 13 page 5); the material being known in the art to have a Kovats value of about 1030, as would be expected to be known in the art {as evidenced by Combariza et al. Table 1 DB-1 entry 10 p 644}; the compositions are indicated to hold the d-limonene, {taken to be a top note material as it comprises a Kovats value of between 1000 and 1400 as provided by the Applicant's arguments, 01 July 2010, first page Top Note/Kovats Index section, paragraphs 3-4}, to a greater extent than compositions not comprising the polymeric material (Example 17 page 5-6 and Example 13 page 5) **{addressing I}**. Therefore, the response factor of the benefit agent is would be expected to be at least about 1.5 as the benefit agent of the instant application and the prior art are identical, within the limitations identified by the Claim 1, and as the polymeric particles in the instantly claimed invention and contains a top note material in the 1000-1400 range **{addressing H}**.

Hood et al., also teach the benefit agent is non-polymerically associated with the polymer particles as the particles are indicated as being discrete {taken as separate} in a liquid matrix (page 2 [0027]) **{addressing G}**.

It would have been further obvious to one of ordinary skill in the art at the time of the invention, to have added the colloidal particle material taught by Hood et al.; for

providing stable compositions for non-polymerically associated benefit agents; employing the same fragrant material taught by Hood et al. for stable compositions, to the compositions of Wells et al., ready for improvement, comprising the same or similar materials for the same or similar applications, with a reasonable expectation of success.

Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wells et al. (US 5,883,058 and its incorporated reference US 5,120,532 to Wells et al.) in view of (Hood US 2002/0058015) as evidenced by Combariza et al. (Journal of High Resolution Chromatography 1994 vol 17 pp 643-646) as applied to Claims 1 and 9 above, and as further evidenced by the International Journal of Toxicology (1982 vol 1 no 4 pp 55-80); and as also evidenced by Marques et al. (Journal of the Brazilian Chemical Society vol 11 no 6 pp 592-599).

As to Claim 7:

The references do not specifically teach of perfuming fragrances with higher Kovats numbers greater than 1700.

On the other hand, Hood et al. further teach of compositions comprising myristyl myristate, a material with a detectable odor that is water insoluble {as evidenced by the International Journal of Toxicology, page 57 1st paragraph}, having a high boiling point {taken to correspond to a low vapor pressure and low amount of olfactorially detectable material}, as would be expected by one of ordinary skill in the art {as evidenced by the International Journal of Toxicology, pages 55-56 and Table 1}; towards applicable materials, the properties thereof being inherent. As the vapor pressure of the Myristyl

myristate is taken as being low, while exhibiting an odor, it would be expected to have a higher Kovats number as the Kovats number is taken to be directly proportional to the number of carbon atoms in an organic material {as evidenced by Marques et al., page 594 col 1-2 bridging paragraph}.

For example, the Kovats value for d-limonene being 1024 corresponding to a formula of C₁₀H₁₆ with a carbon number of 10 and a molecular weight of 136 {per figure A below, as drawn by ChemDraw Ultra 12.0}, and for myristyl myristate (C₂₈H₅₆), a simple estimation would correspond to a Kovats number of higher than twice that of d-limonene, or greater than 2000. As the fragrance taught in Hood et al. is (Examples 13 and 17 pages 5-6) represented by d-limonene, the additional fragrance of Example 15 of the Hood et al. reference (page 5), also comprising myristyl myristate, is to be a composition comprising both d-limonene and myristyl myristate.

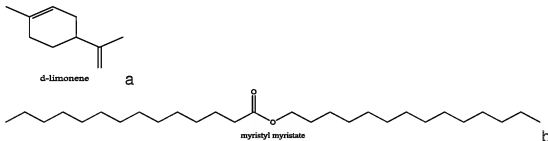


Figure A. Structures for d-limonene (C₁₀H₁₆) and myristyl myristate (C₂₈H₅₆).

Further as to Claims 6 and 8:

The LKI perfume raw material {d-limonene} would be expected to provides a first Average Response Factor (ARF_{LKI}) and the HKI perfume raw material {myristyl myristate} would be expected to provide a second Average Response Factor (ARF_{HKI}) with the perfume polymeric particle having a ratio of ARF_{LKI}/ARF_{HKI} of at least a value of

about 1.2 as the composition polymer particles would be expected to have an affinity ratio of with at least 1.2 times greater than the second affinity as measured by Affinity Test Protocol III, as the polymer with fragrant ingredients read on the instant Claim 1, Claim 8 **{addressing Claim 8}**.

Further, as to Claim 6's polymer delivery system composition and the invention:

As the material compositions taught are also indicated in phases, with and without water soluble components are taken as being separable (e.g., Example 15 of Hood et al., comprising different phases) and the composition of Example 15 has two known fragrant materials, one of high and the other of lower Kovats numbers, and as the polymer particles are comprised having the same or similar of instant Claim 1., are taught by Hood et al. the material properties would be expected to have same or similar properties of those claimed.

Additionally where the Patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on." In re Swinehart, 169 USPQ 226 (CCPA 1971).

Therefore, it would have been further obvious to one of ordinary skill in the art at the time the invention and to have employed a fragrant material with a high Kovats number, along with the fragrance material as taught by Hood et al., as evidenced above, that is known in the art to have a Kovats value in the range between 1000 and 1400; that would also be expected to be applicable to top note fragrance and lower

Kovats index materials while possessing compositional properties calculated with the materials with the same or similar properties; while also providing particles for composition stabilization, to the compositions of Wells et al., with the same or similar materials for the same or similar application, with a reasonable expectation of success.

Response to Arguments

Applicant's arguments with respect to claims 1, 6-9 have been considered but are moot in view of the new ground(s) of rejection.

Examiner Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON GRESO whose telephone number is (571)270-7337. The examiner can normally be reached on M-F 0730-1700.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571 272 1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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